

AMENDMENTS TO THE DRAWINGS

The attached sheet(s) of drawings include Fig(s). 2, 3, 4, 7, 8A, 8B, 9, and 10 and replace the original sheet(s) including such figures.

Attachment(s): 8 Replacement Sheets including Sheets for Figs. 2-4 and 7-10.

REMARKS

As of April 9, 2003, the mailing date of the current action, claims 1-28 were pending in the application. All pending claims stand rejected. The following issues raised by the Office are addressed below: I) failure to present both clean and marked up copies of Amendments; II) the drawings were objected to as failing to comply with 37 CFR §1.84(o); III) rejection of claims 1-28 under 35 U.S.C. § 112 second paragraph, as being indefinite; IV) rejection of claims 1, 3-14 and 23-28 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,592,679 issued to Yung (hereinafter "Yung") in view of U.S. Patent No. 5,911,149 issued to Luan, et al. (hereinafter "Luan"); V) rejection of claims 2 and 15-22 under 35 U.S.C. §103(a) as being unpatentable over Yung in view of Luan, and further in view of U.S. Patent No. 6,023,757 issued to Nashimoto, et al. (hereinafter "Nashimoto"). An amendment to the specification is addressed in item VI below.

I) Failure to Present Both Clean and Marked Up Copies of Amendments

The Applicant appreciates the Office recognizing that the previously filed amendments, although not including both clean and marked up copies of amendments, represented a bona fide attempt to respond to the previous official action. The current amendments are being presented in accordance with the most recent version of 37 CFR §1.121.

II) Objection to Drawings

The Applicant is providing replacement sheets for figures 2-4 and 7-10, and believes that all relevant legends are included in these figures. If these legends are inadequate, the Applicant respectfully requests the Office to point out which rectangular boxes are not labeled.

III) Rejection of Claims 1-28 under 35 U.S.C. § 112 Second Paragraph

The Office rejected claims 1-28 under 35 U.S.C. § 112 second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. In particular, the Office was concerned with the word “substantially.” While the Applicant does not believe that the term “substantially” renders the claims indefinite, the phrase “substantially contiguous” has been removed from the claims in the current amendment. In view of these amendments, the Office’s rejection of claims 1-28 under 35 U.S.C. § 112 second paragraph has been overcome. The Applicant, therefore, respectfully requests the Office to withdraw its rejection of claims 1-28 for indefiniteness.

IV) Rejection of claims 1, 3-14 and 23-28 under 35 U.S.C. §103(a)

The Office rejected claims 1, 3-14 and 23-28 under 35 U.S.C. § 103(a) as being unpatentable over Yung in view of Luan. For the reasons given below, the Applicant submits that claims 1, 3-14 and 23-28 are now in condition for allowance, which allowance is respectfully requested.

Independent Claims 1 and 23

In response to the Office’s rejection of claims 1 and 23 under 35 U.S.C. § 103(a), independent claims 1 and 23 have been amended. The amendment of claims 1 and 23 does not add any new matter. Claims 1 and 23 have been amended to make it clear that each of the register file segments is itself an addressable array, and that *each register file segment is partitionable into global and local registers*. (See, e.g. current application Fig. 6 showing register segments 610, 612, 614, and 616).

Contrast Yung, which shows a global register file distant from the execution pipes, and multiple local register buffers. See Yung, Fig. 2 and accompanying text at column 6, lines 18-28, (showing global register 290 and separate local register buffers 241d-249d). Yung makes no mention of implementing both a local register buffer and any part of a global register file as part of a common array. Neither does Yung suggest using part of an array for local register buffers and another part of the same array for a global register file.

The Applicant submits, therefore, that Yung does not teach a processor or method wherein *register file segments are implemented as addressable arrays and are partitionable into*

global registers and local registers. Since Yung does not teach a register file segment implemented as an addressable array and partitionable into global registers and local registers, the combination of Yung and Luan does not teach all of the elements of amended independent claims 1 and 23.

Furthermore, assuming only for the sake of argument that the combination of Yung and Luan did teach all the elements of amended claims 1 and 23, the Applicant submits that one skilled in the art would have had no reason to combine these two references. The Office combines Yung with Luan to meet the “programmably configurable” limitation recited in independent claims 1 and 23. Yung deals with registers within a processor. Luan deals with external memory sharing/configurations. The Applicant submits that external memory structures are very different from registers on processors, and that just because a particular memory structure works well for memory external to a processor does not mean that the same structure is suitable for use with processor registers. Consequently, the Applicant submits that there is no suggestion that combining the teachings of Luan with the teachings of Yung would yield a successful result.

For the reasons just presented, the Applicant submits that independent claims 1 and 23 are in condition for allowance as amended, and respectfully requests the Office to withdraw its rejection of claims 1 and 23 and them to issue.

Dependent Claims 3-14 and 24-28

For the reasons given above, the Applicant submits that independent claims 1 and 23 are in condition for allowance. Claims 3-14 depend, either directly or indirectly, from independent claim 1, and claims 24-28 depend, either directly or indirectly from independent claim 23. Inasmuch as claims 3-14 and 24-28 depend from allowable independent claims 1 or 23, claims 3-14 and 24-28 are themselves allowable. The Applicant respectfully requests, therefore, that the Office withdraw its rejection of claims 3-14 and 24-28 and allow them to issue.

V) Rejection of Claims 2 and 15-22 under 35 U.S.C. §103(a)

The Office rejected claims 2 and 15-22 as being unpatentable over Yung in view of Luan, and further in view of Nashimoto. In response to the Office’s rejection, the Applicant has

amended independent claim 15. The amendment of claim 15 does not add any new matter. Claim 15, like claims 1 and 23 discussed above, has been amended to make it clear that each of the register file segments is itself an addressable array, and that *each register file segment is partitionable into global and local registers*. For the same reasons given above with respect to claims 1 and 23, the Applicant believes that independent claim 15 is in condition for allowance as amended.

The Applicant also submits that dependent claims 2 and 16-22 are in condition for allowance since claim 2 depends from allowable independent claim 1, and claims 16-22 depend from allowable independent claim 15. Consequently, the Applicant respectfully requests that the Office withdraw its rejection of claims 2 and 15-22, and allow these claims to issue.

VI) Amendment to the Specification

The specification on page 20 has been amended to correct a typographical error that causes the specification to refer to “insert 710,” when the specification should, in fact, refer to “insert 910.” No new matter was added by the amendment.

CONCLUSION

In summary, claims 1-28 are in the case. All claims are believed to be allowable over the art of record, and a Notice of Allowance to that effect is respectfully solicited. Nonetheless, if any issues remain that could be more efficiently handled by telephone, the Examiner is requested to call the undersigned at the number listed below.

CERTIFICATE OF MAILING OR TRANSMISSION

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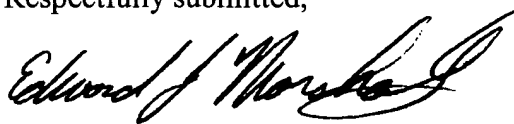
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Edward J. Marshall

Date

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Respectfully submitted,



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